Seeking Order in the Confusion of Bosnia: Does Center of Gravity Apply

A Monograph
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This monograph discusses the applicability of theoretical concepts of center of gravity and decisive point as interpreted in current US Army and Joint doctrine to peacekeeping operations. Center of gravity and decisive points are critical tools for the operational planner in the development of campaign plans. It is important to identify whether they can be applied effectively to operations-other-than-war environments facing US planners in the future.

The monograph first analyzes the operational environment in Bosnia-Herzegovina using planning considerations outlined in the 1993 edition of FM 100-5, Operations. Difficulties in applying the concept of center of gravity are discussed. A peacekeeping environment with multiple factions limits the applicability of the conventional warfare interpretation of center of gravity found in FM 100-5. An alternative interpretation is sought.

Various interpretations of center of gravity are surveyed to identify which, if any, can be applied in an environment such as Bosnia. The interpretations include mass of the enemy army, enemy strengths, enemy weaknesses, and critical vulnerabilities. These are found to be limited in scope to specific situations. Using the writings of Lawrence Izzo, the monograph explores the linkage of center of gravity to aims and capabilities. An interpretation of center of gravity is proposed that defines it according to friendly objectives and enemy capabilities. The enemy capability or characteristic posing the biggest obstacle to successful accomplishment of the friendly aim is designated the center of gravity and becomes the focus of the campaign plan. Success will result from neutralization of this threat.

Decisive points and their relationship to center of gravity are also discussed. Decisive points provide operational planners with opportunities for indirect attack on the center of gravity. Capabilities and characteristics of the enemy are identified that, when attacked, will weaken or neutralize the center of gravity. Once sufficiently weakened, the center of gravity can be attacked directly.

Finally, the analytical process for center of gravity and decisive point identification is applied to peacekeeping operations in Bosnia. Friendly and enemy centers of gravity along with decisive points are identified and discussed.

SCHOOL OF ADVANCED MILITARY STUDIES

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Introduction

With the end of the Cold War, the United States faces a strategic environment filled with new and different threats to global stability. With the former Soviet Union neither facing NATO in Eastern Europe nor threatening to expand its influence into other regions, the possibility of large-scale combat operations has waned somewhat. Recent military activities undertaken by the United States in Somalia, Haiti, and the former Republic of Yugoslavia have fallen into the realm of operations-other-than-war (OOTW). Operational planners, schooled in theories of conventional warfighting, struggle to apply the theoretical constructs of war to these operations-other-than-war. One example of an operation-other-than-war is the "peacekeeping" operation undertaken by NATO forces in the former republic of Yugoslavia. FM 100-23, Peace Operations defines peacekeeping (PK) operations as

military or paramilitary operations that are undertaken with the consent of all major belligerent parties. These operations are designed to monitor and facilitate implementation of an existing truce agreement and support diplomatic efforts to reach a long-term political settlement. . . . PK activities include observation and monitoring of truces and ceasefires and supervision of truces. \(^1\)

If the US deployment to the former Republic of Yugoslavia is a peacekeeping operation, it is critical that we identify which theoretical constructs of war apply in this type environment and which do not.

This monograph will determine whether operational planners in the former Republic of Yugoslavia can use the theoretical constructs of **center of gravity** to assist in preparing plans for peacekeeping operations. The current definitions and

on a conventional and classical warfare paradigm. It provides an analytical tool that helps the operational planner identify enemy strengths in order to attack and defeat them.² Can the concept of center of gravity be applied in other-than-war environments? If not, how does the operational planner analyze the environment and focus the elements of power appropriately?

This monograph is structured in four parts. Part I will illustrate the problems faced by operational planners as they attempt to apply accepted theoretical warfighting constructs derived from FM 100-5, Operations, to operations-other-than-war. A scenario will be developed that portrays a division planner as he applies doctrinal definitions of "center of gravity" to the operational environment in Bosnia. This part will introduce the research question and appropriate subordinate questions. Part I will also provide an overview of the operational environment in Bosnia-Herzegovina.

Part II will determine if a definition or interpretation of center of gravity exists that is applicable to peacekeeping operations. Current operations in the former Yugoslavia will be examined using FM 100-23, Peace Operations, to ensure this environment meets doctrinal criteria for a peacekeeping operation. Next, the monograph will analyze in detail the concept of center of gravity to determine what it is and what effect its use should produce. Consideration will also be given to the notion of decisive point and its relationship to the concept of center of gravity. The current doctrinal definitions from both US Army and Joint Doctrine will be compared

also be examined to identify interpretations of the concept and its application within the conflict continuum. Each definition or interpretation will be analyzed to determine whether it can be applied to operations in Bosnia and what effect its application produces. If no applicable definition or interpretation of center of gravity can be found, a new interpretation will be proposed that provides the planner in a peacekeeping environment a theoretical construct linking strategic aims to the employment of national power at the tactical level.

Part III will apply the appropriate interpretation of center of gravity determined in section II to the environment facing operational planners in Bosnia. The construct will be applied to all parties involved in the operation: US forces, our allies, and all regional parties. The resulting analysis will demonstrate the applicability of the construct to the current environment in Bosnia. Applicability will be validated by assessing the effect produced through application. Part IV will include a discussion of any conclusions to be drawn from the research, a summary of the main points of the monograph, and a discussion of any implications discovered during the research.

I. Peacekeeping in Bosnia

This section presents an analysis of the operational environment in Bosnia based on FM 100-5, Operations. The events and thought processes related over the next several pages are designed to show how a plans officer in the 1st Armored Division might approach campaign plan development in preparation for deployment to Bosnia for peacekeeping operations. The purpose of this narrative is to explore current US Army doctrine for campaign plan development, center of gravity analysis, and provide on overview of the environment facing US forces in the former Republic of Yugoslavia.

Center of Gravity in Bosnia

With the signing of the Dayton peace accords in December 1995, the prospect of US troops deploying to Bosnia for peacekeeping operations became a reality.

American troops, along with forces from Britain, France and other UN nations, would enter the ravaged country of Bosnia-Herzegovina to implement the peace agreement as part of the United Nations Implementation force (IFOR). The US contingent would come primarily from the Europe-based 1st Armored Division. This division had served throughout the Cold War as a critical element of NATO's deterrence against Soviet aggression. Now the leaders and soldiers faced a new challenge: implementing a negotiated settlement in a region where ethnic and religious conflict had been the norm for eight centuries.

Since 1989, the conflict has been a question of self-determination for the different nations within the state of Yugoslavia. Slovenia and Croatia sought independence following the fall of Communism in Eastern Europe. The government of Yugoslavia as represented by Serbia was determined to keep the federation together. When diplomacy failed in 1991, the Yugoslavia Peoples Army forces invaded first Slovenia and then Croatia. International recognition of Slovenian and



Croatian sovereignty along with a brokered peace agreement brought initial fighting to a close in early 1992. The fighting stopped but the conflict over contested areas occupied by ethnic Serbs within Croatia remained unresolved.³

April 1992 brought recognition of Bosnia-

Herzegovina sovereignty by the western allies despite the lack of any agreement among the Muslim, Croatian or Serbian factions within Bosnia as to what sovereignty should look like. Disagreements included whether to remain in the Yugoslav federation and how much territory would belong to each of the three cantons under the control of the three factions. Negotiations again failed and the siege of Sarajevo began

on April 5. In the next three years over 70,000 people lost their lives and over 2 million people of a population of 4.3 million became refugees or were otherwise displaced to other parts of the republic. Among the repercussions was the largest global dispersement of children since World War II.⁵

Preparation and planning within 1st Armored Division for deployment to

Bosnia began long before the agreement was signed in December. As the situation stabilized and the prospect

for peace grew, plans

officers worked to develop
a plan of action for
subordinate units. Plans
developed by the division
would provide a link
between the strategic aims
and the tactical employment

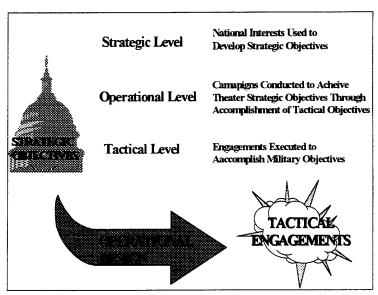


Figure 2 The Levels of War

of forces in theater. This vital link corresponds to the operational level of war (see figure 2).6

Army doctrine for campaign plan development is found in FM 100-5,

Operations (June 1993). Chapter 6, Planning and Executing Operations, discusses

principles of planning and executing operations designed to "confuse, confound, and
rapidly defeat armed enemies of the United States in full-dimensional operations."

between the US and a conventional enemy. Can planning considerations described in chapter 6 be applied to peacekeeping operations?

A closer look at FM 100-5 reveals much that can be applied to peacekeeping operations in Bosnia. Under the heading **Planning Considerations**, FM 100-5 states that

successful planning requires an appreciation of the simultaneous nature of operations, an awareness of the total mission, anticipation of future events, and application of the battlefield framework.⁸

These considerations can be readily applied to operations-other-than-war. The various tasks each subordinate unit within the division will accomplish will undoubtedly be conducted simultaneously. The division's campaign plan would integrate all activities to ensure focus was maintained. Total mission awareness must be maintained in a peacekeeping environment. This could be even more critical than in an environment of direct conflict. The potential negative political impact at the strategic level of errant tactical decisions requires that every peacekeeper understand the mission and how he or she effects the outcome. Anticipation of future events and the organization of the environment according to an appropriate framework are useful considerations for the planner as well.⁹

The planning considerations outlined in FM 100-5 can be applied to peacekeeping operations. The planner can now consider the concepts of campaign design. Four concepts listed in FM 100-5 are center of gravity, lines of operation, decisive points, and culmination.¹⁰ For the purposes of this monograph, the

FM 100-5 states that identifying the center of gravity and massing effects against it is the essence of operational art. This is undoubtedly true for conventional combat operations. Does the same hold true in peacekeeping operations?

Identification of the center of gravity provides the planner with focus and assists in determining campaign objectives. ¹¹ The center of gravity, according to FM 100-5, is defined as

the hub of all power and movement upon which everything depends. It is that characteristic, capability, or location from which enemy and friendly forces derive their freedom of action, physical strength, or will to fight. Several traditional examples of a potential center of gravity include the mass of the enemy army, the enemy's battle command structure, public opinion, national will, and an alliance or coalition structure. 12

This definition is most applicable to an operation like Desert Storm, and appears to be derived from US experience in conventional war. Coalition forces, led by the United States, came to the aid of Kuwait against isolated Iraq. The most often cited centers of gravity for that campaign are listed here: the mass of the enemy army and the battle command structure (army versus air force debate), or public opinion, national will and coalition structure (congress and the American people versus the Arab coalition debate). The division planner would have to consider how this concept applies to the environment they will face in Bosnia. There would be no enemy in the traditional sense. Peacekeeping requires an "impartial, even-handed approach." The parties in conflict are represented by three states: Croatia, Serbia, and Bosnia-Herzegovina (see figure 3). Each state is ethnically mixed. Bosnian Croats, Bosnian Serbs, and Bosnian Muslims within Bosnia-Herzegovina have different visions for the future of that state.

and Muslims were most recently aligned together against Serbia despite having fought each other when the war began in 1992. All had agreed in Dayton to stop fighting and seek a settlement.

The concept of center of gravity, defined by FM 100-5 for a conventional conflict, is not easily applied to the environment of Bosnia. This interpretation was developed based on classical war between rival nations fought with conventional

militaries. This is not the environment facing US planners in Bosnia, nor is it the environment planners are likely to face in the future. That is not to say that the concept itself does not apply. It is merely this interpretation that does not apply. The operational planner requires something to help link



Figure 3

strategic aims to tactical objectives. Operational art provides the linkage and center of gravity is the essence. To be applicable in a peacekeeping environment, center of gravity must be either more broadly defined or redefined altogether. This can be accomplished by answering the question "what is it for?" rather than "what is it?"

Summary

Peacekeeping operations in Bosnia present a complex challenge for the operational commander. Planning at the operational level still requires effective application of the elements of power at the tactical level to achieve strategic aims. The appropriate tactical objectives are not as readily apparent as in conventional operations. Theoretical constructs defined to apply to a conventional conflict between the United States and a single

armed enemy cannot be applied easily in this environment.

The 1993 version of FM

100-5 retains a warfighting

focus. The introduction states

"winning wars is the primary

purpose of the doctrine in this

manual." Center of gravity is a

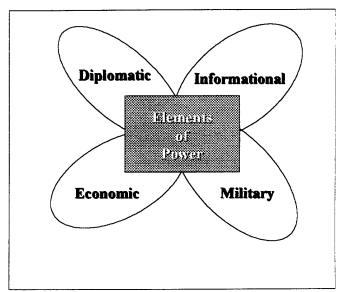


Figure 4
Elements of Power

Executing Operations. Center of gravity as defined in FM 100-5 can be applied easily to a conventional conflict involving the US and an armed adversary. US operational planners will have difficulty applying this interpretation to other operations, such as peacekeeping or other peace operations.

The next section of the monograph will explore the concept of center of gravity to determine if this element of campaign design can be defined more broadly to

facilitate application for other-than-war scenarios. If such a definition can be developed, the operational planner faced with an other-than-war environment can better focus the application of all elements of power, not just military power (see Figure 4).

II. Peacekeeping and Center of Gravity Defined

This section will explore the concept of center of gravity in an attempt to develop a definition more easily applicable to peacekeeping operations. The situation in Bosnia will be evaluated according to doctrinal definitions from FM 100-23, Peace Operations, to ensure the environment satisfies the criteria for peacekeeping operations. Clausewitz's writings will provide a basis from which to begin the discussion of center of

gravity. A subsequent survey
of the genesis and evolution
of the concept in US Army
and Joint Doctrine will
demonstrate the doctrinal
definition and role center of
gravity plays in operational

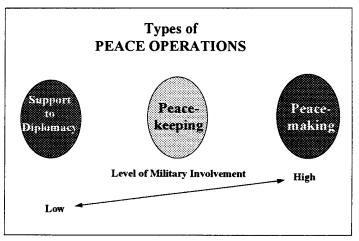


Figure 5
Source: FM 100-23, Peace Operations

design. The definition will then be examined for suitability in a peacekeeping environment. Additionally, the concept of decisive points will be explored to determine how these relate to centers of gravity.

Peacekeeping

According to FM 100-23, <u>Peace Operations</u>, three types of activities fall into the category of peace operations: support to diplomacy, peacekeeping, and peace

of the major belligerents and include activities designed to monitor and facilitate negotiated truce agreements and support diplomatic efforts to reach a long-term political settlement. Military forces may either act as "truce observers" or "truce supervisors." Observation and monitoring of truces and cease-fires are normally conducted by individual military personnel. Activities include observation, monitoring, verification, and reporting of compliance by the parties to the conflict. Civilian officials of international organizations or governments may also serve as observers and monitors. The multinational force in the Sinai is an example.

Supervision of truces normally involves military formations. Units are introduced to the conflict area to fulfill specific mandates in order to permit diplomatic negotiations to take place with hostilities suspended. This can only be accomplished with consent of the major belligerents. Truce supervision involves significantly more forces than truce observation and the forces involved may be much more active. The monitoring and reporting as conducted by observers are replaced by activities designed to ensure compliance with the peace agreement. This may include patrolling, searching of installations or vehicles, and the establishment of movement control points. Additionally, supervisory forces may be called upon to interpose themselves between the parties in dispute. Once the buffer zone between belligerents is occupied, peacekeeping forces may be required to supervise disengagement and withdrawal of the conflicting parties.¹⁸

It can be seen that operations being conducted by US forces in Bosnia fall into

NATO forces have the consent of the belligerent parties. The Dayton Peace

Agreement is in place and forces are in Bosnia to monitor and facilitate its

implementation. The monograph will now explore the origins of center of gravity.

Center of Gravity

The concept of **center of gravity** comes from On War, an unfinished theoretical study written by Carl von Clausewitz and published by his wife after his death in 1832. Clausewitz uses the mechanical analogy of center of gravity to describe the point of "balance" of an adversary. Appropriate force applied at the correct place will throw the entire element off balance, thus giving advantage to the opponent. ¹⁹

Center of gravity as a theoretical construct seems relatively new in US doctrine. Appendix B of the 1986 edition of FM 100-5 stated the concept was not new to the US Army in application; it just had not been dealt with in doctrinal literature for some time. It defined center of gravity as "that characteristic, capability, or locality from which the force derives its freedom of action, physical strength, or will to fight." The Clausewitzian links to a mechanistic analogy are maintained, citing the "hub of all power" expression from On War. The 1993 edition of FM 100-5 retained this definition of center of gravity. The 1993 edition of FM 100-5 retained this

FM 100-5 makes clear the role of center of gravity in operational design. The essence of operational art is "identification of the enemy's operational center of gravity -- his source of strength or balance -- and the concentration of superior combat power against that point to achieve a decisive success." Concentration against a "point"

seems to imply a single center of gravity in time. This is appropriate since Clausewitz instructs his readers to trace potential centers back to a single one, if possible.²⁴

Decisive success comes from damage or destruction of the center of gravity because this causes the enemy force to become unbalanced, producing "a cascading deterioration in cohesion and effectiveness that may result in complete failure, and which will invariably leave the force vulnerable to further damage." Clausewitz resorts to a mechanical analogy to describe his concept. The enemy is a physical entity whose mass can be analyzed to determine the point of balance or center of gravity. He describes war as

a duel on a larger scale. Countless duels go to make up war, but a picture of it as a whole can be formed by imagining a pair of wrestlers. Each tries through physical force to compel the other to do his will; his *immediate* aim is to *throw* his opponent in order to make him incapable of further resistance (author's Italics).²⁶

The most efficient way to throw the opposing wrestler is to identify his center of gravity and push that point out of balance. That accomplished, the opponent has no choice but to fall. This would be simple except the opponent knows to protect his center of gravity from attempts to push it out of balance. If the opponents are of equal strength, actions during the early stages of the match may include attempts to maneuver to a position of advantage where the opponent's center of gravity is exposed. Unsuccessful, the match continues until, through exertion, one opponent or the other tires, allowing the other to gain advantage and throw his exhausted adversary. The objective and center of gravity have not changed. Direct action was not possible so an indirect approach was applied.

Clausewitz's writing style coupled with problems in translation make some elements of the work prone to multiple interpretations. Center of gravity has been widely discussed and interpreted since its reintroduction in 1986. Inclusion in doctrine made its role and meaning a topic for many theorists. Different interpretations will now be discussed to determine which are appropriate for peacekeeping operations within the operations-other-than-war structure.

One possible interpretation is that the center of gravity always corresponds to the greatest concentration of combat force. Theorists Lawrence Izzo and James Schneider concluded this based on the analogy of the duel. In <u>Clausewitz's Elusive</u> Center of Gravity, they state

Clausewitz presented war as a duel between two opponents who seek to unbalance and throw one another. Each of the opponents has a certain center of mass with a center of gravity. On the literal battlefield, it is two armies in collision that seek to throw the other. They, too, each have a certain center of gravity.²⁷

Clausewitz supports this conclusion with statements like "centers of gravity will be found wherever the forces are most concentrated." As discussed in section I, this does little for the operational planner in a peacekeeping environment. The armies have already stopped fighting; identifying them as centers of gravity serves no purpose as they have already been neutralized.

Another debate over the meaning of center of gravity is what Robert Leonhard calls "Of Kings and Queens."²⁹ Leonhard ponders whether, in a game of chess, the center of gravity is the king or the queen. The queen is the most versatile and powerful piece; without it, victory is difficult to achieve. Yet, the game is not lost until the king,

One is a strength, the other a weakness. Which of the two is the center of gravity?

In <u>The Center of Gravity is Not an Achilles Heel</u>, Lawrence Izzo concludes center of gravity is a strength. When trying to identify the center of gravity, he suggests determining what would bring victory to the enemy. That which is most vital to the enemy in the accomplishment of his objective should be the target. Izzo predicts this will always be concentration of enemy strength.³⁰

The Marine Corps sees center of gravity as a weakness, or what FMFM 1 calls a **critical enemy vulnerability**. The Marines justify standing Clausewitz on his head by comparing two distinct styles of warfare: **maneuver** warfare and **attrition** warfare. Attrition warfare seeks "strength against strength to exact the greatest toll from [the] enemy." Maneuver warfare seeks to "circumvent the problem and attack it from a position of advantage rather than meet it head on. The goal is the application of strength against selected enemy weakness." To be most successful, the object of the maneuver must be a weakness. The Marine Corps considers Clausewitz an attritionist and therefore the theory of center of gravity residing where the enemy is most concentrated is flawed. The maneuver of gravity residing where the enemy is most concentrated is flawed.

FMFM 1 applies this construct at all levels of war. Examples of strategic critical vulnerabilities include popular opinion or a shaky alliance. Tactical vulnerabilities include exposed flanks, chokepoints on a line of communication, or a gap in the enemy defense.³⁵ Some authors attribute this focus on maneuver to the size and capability of the Marine Corps.³⁶ Force structure precludes a strength on strength

attacked because success at that point will serve to weaken the enemy strength. As Izzo points out, attacking weaknesses is "a means to an end, a way to make the actual center of gravity vulnerable to attack." What the Marines and others who describe center of gravity as a weakness are describing are **decisive points**, or what FM 100-5 call "keys to getting at centers of gravity." Decisive point will be discussed in detail later in the section.

Like FM 100-5, Joint Pub 3-0, <u>Doctrine for Joint Operations</u>, defines center of gravity as "those characteristics, capabilities, or localities from which a military force derives its freedom of action, physical strength, or will to fight." Joint Pub 3-0 instructs operational planners to use the concept of center of gravity to determine analytically the friendly and enemy sources of strength along with weaknesses and vulnerabilities. These sources of power, or centers of gravity, then become objectives for massed friendly effects.

Weaknesses and vulnerabilities are useful when the enemy center of gravity is well protected. Indirect attacks on the enemy strength are accomplished through direct attacks on weaknesses or vulnerabilities. Once the center of gravity is sufficiently weakened through indirect attack, the joint force can attack the enemy's source of strength directly. 40

Another definition of center of gravity can be derived from Lawrence Izzo's

The Center of Gravity is Not an Achilles Heel. He correctly posits that determining the center of gravity requires analysis of the enemy. The objective of the enemy must be considered in determining his center of gravity. The question to be asked

is "what is he attempting to accomplish?" His center of gravity is the essence of his combat power which will enable him to achieve that goal. Thus the aim and the combat power allocated to achieve that aim are intimately linked.⁴¹

COL Izzo has established a linkage between the enemy center of gravity and enemy aims. The operational planner first identifies the enemy's objectives. From these, he determines what will enable the enemy to accomplish these objectives. Defeat or neutralization of this capability and the enemy will be unable to achieve the aim.

Center of Gravity can be determined only with respect to objectives.

Since war is a clash of wills, the enemy and friendly objectives will be closely linked as well. The relationship of friendly and enemy aims allows us to go one step further. The enemy center of gravity is linked to the *friendly* aims. Once the strategic objective is determined, the operational planner identifies the biggest **obstacle** to the accomplishment of this objective. That which most threatens successful attainment of the operational endstate is the enemy center of gravity. This definition is equally applicable to conventional conflict or to operations-other-than-war. If, like in Desert Storm, the strategic objective is to free a country from military aggression, the center of gravity might be a specific military formation along the lines of the Iraqi Republican Guard divisions. On the other hand, if faced with a counter-insurgency operation, like in Malaya after World War II, the strategic objective of a free and democratic Malaya requires neutralization of the communist insurgency. The insurgency is the enemy center of gravity. 42

This analytical process can be used to identify the friendly center of gravity as

accomplishment of his objective is the friendly center of gravity. Once identified, a friendly center of gravity can be protected until properly employed to deny the enemy his objective. In Desert Shield/Storm, the friendly center of gravity was VII Corps. The biggest threat to Iraq's continued occupation of Kuwait in 1990-91 was the presence of the US VII Corps in Saudi Arabia. It was not until ground offensive operations by this force were initiated in February 1991 that Iraq was forced to withdraw.

Enemy centers of gravity cannot be described as *always* being something on a short list. They will vary based on friendly objectives and enemy capabilities relevant to that specific scenario. The center of gravity in a single scenario may change over time as objectives and capabilities change. Theoretical discussions concluding that centers of gravity are enemy strengths or enemy weaknesses or enemy vulnerabilities miss the point.

In describing war as a duel on a larger scale, Clausewitz demonstrates this clearly. The objective for each wrestler is to throw his opponent. The obstacle to the attainment of this goal is the weight and balance of the opponent. This is represented by center of gravity. To achieve the aim and throw the opponent, this center of gravity must be moved to a point where balance no longer exists. The opponent is then off balance and easily thrown. Likewise, the operational planner first recognizes the strategic aim. Analysis of the enemy reveals his capability to preclude successful accomplishment of this aim. To ensure success, the campaign plan is developed to

obstacle, the enemy is left incapable of effecting friendly attempts to achieve the strategic aim.

While this appears simple, defeating the enemy center of gravity is much tougher in practice. The enemy will realize his center of gravity is critical to success. It enables him to achieve his aim and deny the adversary from attaining the opposing aim. It will be protected either actively or passively. How the enemy center of gravity is protected will give pause to the operational planner. He must decide whether to attack it directly for a quick victory or take an **indirect approach**. As James Schneider points out in <u>The Theory of Operational Art</u>, this decision is one of feasibility and suitability.

Is the direct approach feasible? Since the direct approach implies some preponderant level of combat power, we must be strong enough to shatter the enemy. Is the direct approach suitable? This question largely concerns the nature of our force structure and the time available. If the answer is no to either or both these questions, we must consider the indirect approach.⁴³

Choice of an indirect approach necessitates analysis and selection of decisive points.

Decisive Points

This is the concept of "relative superiority, that is, the skillful concentration of superior strength at the decisive point." Jomini talked of four types of decisive points in Art of War. The first was decisive geographic point, defined as a "point the possession of which would give the control of the junction of several valleys and of the center of the chief lines of communication in a country." He ascribed the name decisive

strategic point to "all those which are capable of exercising a marked influence either upon the result of the campaign or upon a single enterprise." Decisive points of maneuver were found on "that flank of the enemy upon which, if his opponent operates, he can more easily cut him off from his base and supporting forces without being exposed to the same danger." Finally, he defines decisive point of the battlefield as being "determined by

- 1. Features of the ground.
- 2. Relation of the local features to the ultimate strategic aim.
- 3. Positions occupied by the respective forces."

Jomini sees decisive points as a means to an end. Control of these locations sets the conditions for victory. The location is important only with respect to the advantage gained through its control.

FM 100-5, Operations, states "decisive points provide commanders with a marked advantage over the enemy and greatly influence the outcome of an action.

[they] are not centers of gravity; they are the keys to getting at centers of gravity."

FM 100-5 establishes a direct relationship between decisive points and the enemy center of gravity. Faced with more decisive points in a theater than can be controlled with available resources, the planner is instructed to "analyze all potential decisive points and determine which enable eventual attack of the enemy's center of gravity."

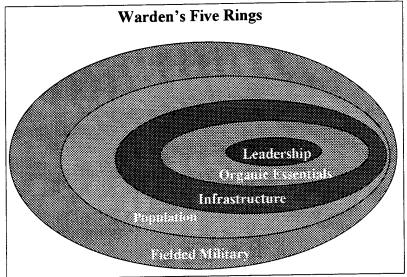
FM 100-5 goes on to describe in detail examples of what decisive points may be. In the course of this discussion of various examples, the relationship of these points to the center of gravity is lost. The reader is left with another list of potential decisive points

defeating the center of gravity.

Joint Pub 3-0, <u>Doctrine for Joint Operations</u>, does a better job of maintaining a relationship between decisive points and centers of gravity. The definitions are the same as proposed by FM 100-5. Decisive points provide "a marked advantage over the enemy and greatly influence the outcome of an action." Again, decisive points "are not centers of gravity; they are the keys to attacking protected centers of gravity." Joint Pub 3-0 does not talk about decisive points without directly relating

them to defeat of centers of gravity.

Decisive points
and how they relate to
centers of gravity can
be applied across the
conflict spectrum.



COL John A.

Figure 6

Warden's five-ring model is a useful technique for decisive point identification (see figure 6). 49 COL Warden mistakenly identifies the elements represented by the five rings as centers of gravity. In reality, these vulnerabilities represent decisive points that, when attacked, leave the true center of gravity exposed and vulnerable. His design of the air operation during Desert Storm is an example of the effect such attacks can have on the operational center of gravity in a conventional war. The Iraqi center

of gravity in the form of the Republican Guard Divisions was left vulnerable to VII

Corps ground operations through protracted air operations focused on decisive points
derived from his five-ring model.

Likewise, for the British in Malaya, decisive points were identified to weaken and expose the communist insurgency. Efforts to enhance government legitimacy, cause insurgents to abandon their cause through offers of money, and direct military action against the insurgents when appropriate are examples of decisive points.

Ultimately the insurgency was neutralized through these efforts and defeated by 1960.

Summary

As discussed at the end of section I, FM 100-5 defines center of gravity too narrowly. The warfighting focus of the manual and its definitions make it difficult for the operational planner in an operation-other-than-war to apply the concepts. An analysis of Clausewitz shows that the definition of center of gravity need not be limited. Clausewitz intended for the reader to see a relationship between the aims of the opposing forces. That capability which most enables a force to accomplish its aims should be the focus of effort. A center of gravity exists where this capability is most concentrated. The clash of opposing wills that describes conflict also describes the relationship between centers of gravity. That enemy capability which most threatens the accomplishment of the friendly aim should be the focus of effort in the friendly campaign. Defeat or neutralize this center of gravity and the enemy will be unable to effect successful attainment of the friendly aim. This is the essence of operational art

whether conducting conventional war or operations-other-than-war.

Direct attack on centers of gravity will be difficult. Commanders understand success depends on protecting these vital capabilities. In order to defeat or neutralize opposing centers of gravity, an indirect approach may be appropriate. Analysis, identification, and attack of decisive points leading to centers of gravity are critical to indirect attacks. Decisive points often correspond to weaknesses and vulnerabilities. As these elements are attacked, the center of gravity is weakened or exposed. Only then can the center of gravity be attacked directly. Using Clausewitz's analogy of the duel, only by gaining a position of advantage or exhausting the opponent can a wrestler of like ability hope to expose his opponent's point of balance for the decisive throw.

Much of the debate over the meaning of center of gravity can be traced to a fundamental misunderstanding of these constructs. Critical vulnerabilities as described in FMFM 1 are nothing more than decisive points. Attacks on these weaknesses serve to weaken or expose the enemy's strength. This is, by definition, what decisive points provide the operational planner. Faced with a protected enemy center of gravity, direct attack may not be possible initially. Rather than identify a weaker, more attainable objective and label it a center of gravity, the planner should merely apply an indirect approach. Weaknesses and vulnerabilities are identified that serve to weaken or expose the critical capability. Successful attacks upon these decisive points lead to the defeat or neutralization of the center of gravity. Decisive

These constructs are readily applicable to operations-other-than-war. In the next section, center of gravity and decisive points as defined in the monograph will be applied to peacekeeping operations in Bosnia. The environment faced by operational planners will be analyzed to determine how these constructs apply. Strategic objectives, center of gravity and decisive points for getting at this center of gravity will be discussed.

III. Peacekeeping in Bosnia

This section of the monograph will analyze the strategic environment of Bosnia. The process for determining center of gravity discussed in the last section will be applied to the peacekeeping mission in the region. A center of gravity will be determined and decisive points will be identified. Identification of these will provide organization to campaign plan development.

Center of Gravity

Center of gravity cannot be determined without a clear understanding of the strategic objectives. Objectives can be found in several places. The Dayton agreement lays out the objectives for the agreement in Article I of Annex 1-A:

The purposes of these obligations are as follows:

- (a) to establish a durable cessation of hostilities. Neither Entity shall threaten or use force against the other Entity, and under not circumstances shall any armed force of either Entity enter into or stay within the territory of the other Entity without the consent of the government of the latter and of the Presidency of Bosnia and Herzegovina. All armed forces in Bosnia and Herzegovina shall operate consistently with the sovereignty and territorial integrity of Bosnia and Herzegovina;
- (b) to provide for the support and authorization of the IFOR and in particular to authorize the IFOR to take such actions as required, including the use of necessary force, to ensure compliance with this Annex, and to ensure its own protection; and
- (c) to establish lasting security and arms control measures as outlined in Annex 1-B to the General Framework Agreement, which aim to promote a permanent reconciliation between all Parties and to facilitate the achievement of all political arrangements agreed to in the General Framework Agreement.⁵⁰

The military role in the operation is to provide a presence and keep fighting from breaking out again. Implementation forces were deployed into Bosnia to maintain the

ceasefire and allow other agencies to conduct other tasks associated with the peace settlement such as elections and humanitarian missions.⁵¹

Secretary of Defense William Perry echoed these words in a speech to the soldiers of the First Armored Division in November 1995. Dr. Perry told the troops

the United Nations will be involved in civilian programs that include rebuilding the infrastructure, revitalizing the economy, bringing refugees back for resettlement, and providing for free elections. Those tasks will not be your job. Your mission is to provide the security environment that allows all those other things to be done. 52

A secure environment for United Nations agencies and troops of the IFOR as well as for peoples of the different factions residing in the region, including Serbs, Croats, and Muslims. Without this secure environment, the activities designed to produce a lasting settlement would have difficulty taking hold.

Another strategic objective can be derived from US recognition in 1991 of the sovereignty of Bosnia-Herzegovina.⁵³ All territories gained through armed conflict within the borders of the Republic of Bosnia-Herzegovina would be returned and the borders restored rather than allow Serbian aggression to stand. While all parties agreed to stop fighting, agreement from the Serbs to participate in a Bosnian Confederation would be much more difficult to achieve.

With the strategic objectives of cessation of hostilities and an independent, restored Bosnia-Herzegovina in hand, the next step is to identify those characteristics existing in the region that present obstacles to the accomplishment of this objective. Determination of the obstacles to a durable end to the fighting in Bosnia requires analysis of what caused the fighting in the first place. Factors that led to armed

these causes come the obstacles to a lasting peace.

The causes of the recent war in Bosnia are generally grouped into two categories. ⁵⁴ One view holds that the war was an act of aggression by Serbs against the legitimate government of a sovereign member of the United Nations with the objective of a "Greater Serbia." The second view holds that conflict in Bosnia was a civil war based on revival of ethnic conflict. Forty years of communism kept animosities hidden, repressing ethnic identities. After the fall of communism, feelings of ethnic nationalism fed desires for self-determination among the constituents of the former Yugoslavia.

While these are generally held to be the most likely causes, other authors have proposed alternatives. Susan Woodward, in her book <u>Balkan Tragedy</u>, concludes that civil war and ethnic conflict merely describe the war as it appeared in 1994-5. She concludes the true cause of war in the former Yugoslavia lies in the "disintegration of governmental authority and the breakdown of a political and civil order." The void remaining when the central control of communism went away could not be filled effectively by Yugoslav attempts at a decentralized federation. The transition to a free market economy coupled with less government control put too much pressure on the society in a short time. Declining living standards caused a similar decline in the rights and securities upon which Yugoslavians had come to rely. International pressures for economic liberalization forced less control by the central government when more control was necessary to keep the state together during the crisis. As a

independence, backed by the West, broke the federation of Yugoslavia apart.

The Serbian conservative government of President Milosevic was under similar pressure to reform in what remained of the Republic of Yugoslavia. Milosevic and the government in Belgrade sought to maintain their influence by using ethnic Serbian nationalism as a political strategy designed to mobilize Serbs in the former Yugoslavia. The result was conflict along ethnic lines designed by Milosevic as a short-term means to an end in order to maintain the power of conservative Serb leaders within Serbia. The cause of the conflict was the disintegration of Yugoslavia during the 1980s coupled with the call for societal reform that threatened the political position of conservative Serbian leaders. Milosevic and his conservative Serbian government stand as the biggest threat to cessation of hostilities and maintenance of an independent Bosnia-Herzegovina.

Identification of President Milosevic and his government as the obstacle to the strategic objective provides the operational planner with the **center of gravity**. The goal of the campaign becomes neutralization of the influence of President Milosevic and his government within Bosnia. All elements of national power should be used to overcome this influence. Then power can be redirected to strengthen the federation in Bosnia and establish the infrastructure necessary to protect the peoples of that state.

United Nations forces will probably be unable to attack Milosevic and his government directly, at least initially. The center of gravity is protected and direct action against it may have unwanted secondary effects. Peacekeeping requires an

Milosevic would gain strength if perceived to be under attack by the UN and the US. The campaign to neutralize Milosevic will require an indirect approach. The next step involves identification of decisive points that will lead to a weakening of the center of gravity. Success at these points will weaken Milosevic and his government and allow more direct action after a period of time.

Decisive Point Analysis

The operational planner conducting decisive point determination needs to consider all four elements of national power (see figure 7). Each element provides capabilities the others cannot. The operational planner integrates these elements of power through the campaign plan. The campaign is a

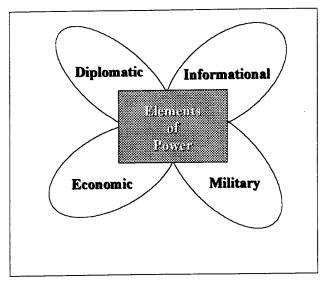


Figure 7
Elements of Power

"series of related major operations that arrange tactical, operational, and strategic actions to accomplish strategic and operational objectives." The campaign plan synchronizes operations across time, space, and purpose. Decisive points provide objectives for the tactical, operational, and strategic actions. Synchronization in purpose is derived from an analysis of the center of gravity and its linkage to the decisive points.

Military Decisive Points

The primary role for military forces is to maintain the separation of warring factions. Other elements of power will enjoy a greater opportunity for success if peace can be enforced for a period of time. The military role, as stated by Dr. Perry, is to provide a secure arena for the other elements of power. There is always overlap in the application of the elements of power. In an environment like Bosnia, the military decisive points will relate directly to diplomatic, economic, and informational decisive points. In conjunction with maintaining separation, military forces should make every effort to locate and detain indicted war criminals from each faction. This effort will demonstrate even-handedness and an unwillingness to allow criminal activities to go unpunished. It will also serve to remove criminal elements that stand as an obstacle to an eventual agreement between the people of Bosnia. Success at this military decisive point will enhance diplomatic decisive points discussed below. Indicted Bosnian Serb leaders like Radovan Karadzic have close links to Milosevic and his government in Belgrade. Removal of these leaders will reduce Milosevic's influence with Bosnian Serbs. Opportunities for success at informational decisive points can then be exploited. As Milosevic's influence decreases in Bosnia, efforts to enhance the independence of local Serb military commanders can be made by IFOR troops. Belgrade's hold on Bosnian Serbs will eventually be neutralized.

Diplomatic Decisive Points

Engagement at diplomatic decisive points will involve representatives from the

United Nations and Europe. The objective is to elevate representatives from local Serb communities in Bosnia and reduce the influence of Milosevic. Agreement with local leaders will establish them as the voice of their people, not Belgrade. Incentives should be presented through direct negotiations with Bosnia Serb leaders to create in Bosnia an atmosphere of compromise. Avoidance of a return to armed conflict requires the establishment of political processes for settling disputes. Sacrifice will be required of not only Serbs, but Muslims and Croats as well. Leaders of the Croat and Muslim people in Bosnia must be willing to participate and compromise in negotiations that draw the Bosnia Serbs into political processes. The alternative of US/NATO withdrawal and continuation of the war will provide the necessary incentive. Finally, incentives must be provided to President Milosevic to seek alternatives to his concept of "Greater Serbia."

Informational Decisive Points

The informational campaign should focus on making the people of Bosnia remember the peaceful times before 1991. Many examples exist of neighboring villages, one Muslim and one Serb, that before the conflict worked and lived as friends. Now these same villages are separated along ethnic lines as a result of the desires for division President Milosevic operating through Bosnia Serb leaders. Efforts to overcome the influence of political leaders in the everyday lives of villagers will open the way for former friends to renew the bonds of pre-war Bosnia. More importantly, it will serve to remove the influence of Milosevic and Belgrade as well.

Focus on war-weariness will inspire the people of Bosnia to seek peaceful solutions instead of conflict. Bosnians must come to realize that Milosevic and Serbia began the war for political gains and Bosnians of all ethnicities have suffered.

Economic Decisive Points

Economic stability and improved standards of living among Bosnians are critical to lasting peace. As stated previously, declining living conditions among citizens of Yugoslavia was a major cause of the conflict in the first place. Many fears among the constituent groups stem from lower standards of living and decreased economic opportunity. Economic opportunities can be provided to Bosnia by focusing economic power towards investment and infrastructure rebuilding. The result will be a decrease in dependence on external support from either Europe or Serbia. Milosevic retains an outlet for his strategy of ethnic hatred as long as Serbs in Bosnia see no economic opportunity. The deaths of Commerce Secretary Ron Brown and representatives of American business could severly hamper efforts to introduce investment into the region. Economic success will depend on others immediately continuing the work of these men and women. Similar efforts should be extended to Serbia and Croatia in order to help the leaders of these nations focus on internal prosperity rather than external conflict as a means to maintain their power base.

Friendly Center of Gravity

The first step in determining the friendly center of gravity is to identify the

Determination of the enemy, much less the enemy objective, is difficult in peace operations. Analysis of the causes of the conflict has revealed the enemy and his objective. Serbian President Milosevic and his strategy of racial division caused the war in Bosnia; he and his government represent the enemy to peace. His objective is continued conflict in Bosnia until he can consolidate his power and stabilize the political situation in his favor. The obstacle to accomplishment of this aim lies in the Bosnia Federation. Milosevic does not realize his objective as long as the Federation remains in place. As the center of gravity, the Bosnian Federation requires protection and efforts to make it stronger. Many of the decisive point actions discussed above will also help protect and strengthen the friendly center of gravity. Additional objectives for each element of national power, especially diplomatic power, can be identified to increase the strength of the Federation.

Summary

This section applied the construct of center of gravity as defined in section II to the environment in Bosnia. The goal was to identify friendly and enemy centers of gravity based on the strategic objectives and the operational environment. The situation in Bosnia was analyzed to determine the IFOR objectives. These objectives were derived from the Dayton Peace Agreement and US policy in the former Yugoslavia. The causes of the conflict were discussed and traced back to the likely root cause of economic hardship after the fall of communism in the late 1980s. Ethnic

hostilities resulted from the strategy of racial division initiated by President Milosevic and his government in Belgrade in an attempt to retain political power for Serbian conservatives. This policy represents the biggest obstacle to lasting peace in Bosnia. Therefore, Milosevic and his Serbian conservative government represent the enemy center of gravity.

It was determined that operational constraints would inhibit direct action against the enemy center of gravity. Decisive points for each element of national power were identified that would allow for neutralization of President Milosevic while protecting and strengthening the friendly center of gravity, the Bosnian Federation.

The concepts of center of gravity and decisive points as defined in section II can be successfully applied to peacekeeping operations in Bosnia. Determination of friendly and enemy objectives along with obstacles to successful accomplishment of these objectives provides the operational planner with a way of identifying centers of gravity and organizing the environment. The planner can now take this information and develop the campaign plan.

IV. Conclusion

The Cold War is over and the United States now faces a strategic environment filled with new and different challenges. Recent military activities undertaken by the United States in Somalia, Haiti, and the former Republic of Yugoslavia are characterized by actions short of conventional war. Conventional war theory as described in FM 100-5, Operations, and Joint Pub 3-0, Doctrine for Joint Operations, is not easily applied by operational planners in these environments. The purpose of this monograph was to explore the concepts of center of gravity and decisive point to determine whether operational planners can apply these theoretical constructs, defined for conventional war in current doctrine, to peacekeeping operations.

Center of gravity, as defined in FM 100-5 and Joint Pub 3-0, was found to have limited utility for the operational planner in a peacekeeping environment. Section I of the monograph attempted to apply these interpretations to peacekeeping operations in Bosnia. The narrow definitions from current doctrine were difficult to apply effectively. The war-fighting focus of FM 100-5 produces a limited definition best applied to armed conflict between two adversaries. This leaves the operational planner with a couple of choices. He can decide either to deem the construct inappropriate for peacekeeping or attempt to redefine it to fit his environment. If the construct is deemed inappropriate, a void exists in US planning doctrine that must be filled by something else. Identifying the enemy center of gravity is critical in campaign planning. It provides focus in planning and presents the most direct path to victory. ⁵⁹

Without center of gravity, the planner must substitute something defined appropriately that provides the same utility. The planner now finds himself faced with the second alternative.

Section II of the monograph explored different interpretations of center of gravity. A definition was proposed based on this survey that is applicable throughout the conflict continuum. Using the analogy of two wrestlers from Clausewitz and Lawrence Izzo's determination of a linkage between center of gravity and enemy aims, center of gravity can be defined according to friendly strategic objectives and the obstacles that exist to successful accomplishment of these aims. The doctrinaire approach of building lists of possibilities from which planners can chose is replaced with an analytical process that helps planners determine the center of gravity based on the environment they face, the strategic objectives they have been given, and the capabilities of the parties involved. This process can be applied to any operation, from conventional war to the non-conventional environment of OOTW.

The monograph also addressed **decisive points** and their relationship to center of gravity. Current doctrine describes decisive points as "usually geographic in nature." This Jominian interpretation is best suited to geometrical organization of lines of operation within a theater. The planner will identify terrain along the lines of operation that will become critical to success as the campaign is executed. Jim Schneider and others find an alternate interpretation within the concept of the **indirect approach**. Decisive points are critical vulnerabilities with a direct relationship to the enemy center of gravity. Identification provides a planner with opportunities to

weaken or neutralize the center of gravity without attacking it directly. This interpretation seems more appropriate when describing a concept that provides "keys to getting at centers of gravity." The monograph also concludes that COL Warden's analysis of the enemy as a system provides a useful analytical tool for decisive point identification using his five rings.

Section III of the monograph applied the analytical process of center of gravity and decisive point identification described in section II to peacekeeping operations in Bosnia. It was shown that the process is applicable and has utility for the operational planner in that environment. Using induction, the analytical determination of center of gravity and decisive points will apply to other peace operations as well as conventional war. The strategic environment confronting the United States requires versatility in planning and executing campaigns. The broader applicability of the process proposed here will be more useful to the operational planner than the narrow definitions found in current doctrine.

Several questions about the theory of center of gravity were beyond the scope of the monograph and remain unanswered. Is there a single center of gravity for each side in an operation or could there be more than one? Clausewitz advises that all effort should be made to trace them to a single source but he admits that this may not always be possible. Does a center of gravity exist at the operational or do centers of gravity appear at all levels? One of the fruits of the confusion surrounding the meaning of concept has been its use by commanders from battalion through CINC-level to identify focus of main effort, enemy vulnerabilities, and critical strategic capabilities. Finally,

is the center of gravity a physical entity or can it reside in an idea? When dealing with insurgency, is the greatest obstacle to success the divergent political idea or the individuals and organizations espousing it? Removal of the individuals and organizations will likely leave the idea for others to adopt. There are many other aspects of the theory of center of gravity that warrant further research and discussion. These are only a few.

The world has changed since the Soviet collapse in the 1980s. US Army and Joint Doctrine need to keep up with a complex and evolving strategic environment. The conventional war focus of FM 100-5 requires modification to ensure it remains valid for the different types of operations that will confront US commanders and planners in the future. Two modifications are proposed here for the concepts of **center of gravity** and **decisive point**. Inclusion of modifications such as these will ensure that FM 100-5 and Joint Pub 3-0 remain keystone manuals

Endnotes

- ¹ Department of the Army, <u>FM 100-23</u>, <u>Peace Operations</u>, (Washington, DC: GPO, December 1994), 4.
- ² Department of the Army, <u>FM 100-5</u>, <u>Operations</u>, (Washington, DC: GPO, June 1993), 6-7. (Hereafter referred to as FM 100-5, 1993)
- ³ Woodward, Susan L, <u>Balkan Tragedy</u>, (Washington, DC: The Brookings Institute, 1995), 146.
- ⁴ Ibid., 196-197.
- ⁵ Ibid., 2.
- ⁶ FM 100-5, 1993, 6-2.
- ⁷ Ibid., 6-0.
- ⁸ Ibid., 6-3.
- ⁹ Ibid., 6-3, 6-5.
- ¹⁰ Ibid., 6-7.
- ¹¹ Ibid., 6-7.
- ¹² Ibid., 6-7.
- ¹³ FM 100-23, 13.
- ¹⁴ FM 100-5, 1993, v.
- ¹⁵ FM 100-23, 2.
- ¹⁶ Ibid., 4
- ¹⁷ Ibid., 4
- ¹⁸ Ibid., 5

- ¹⁹ Clausewitz, Carl von, <u>On War</u>, edited and translated by Michael Howard and Peter Paret, (Princeton, New Jersey: Princeton University Press, 1976), 75.
- ²⁰ Department of the Army, <u>FM 100-5</u>, <u>Operations</u>, (Washington, DC: GPO, May 1986), 179.
- ²¹ Ibid., 179.
- ²² FM 100-5, 1993, 6-7.
- ²³ Ibid., 10.
- ²⁴ Clausewitz, 617.
- ²⁵ Ibid., 179.
- ²⁶ Clausewitz, 75.
- ²⁷ Schneider, James J. and Lawrence L. Izzo, "Clausewitz's Elusive Center of Gravity," Parameters, Vol. XVII, No. 3, September 1987, 48.
- ²⁸ Clausewitz, 485
- ²⁹ Leonhard, Robert R, <u>The Art of Maneuver</u>, (Novato, CA: Presido Press, 1991), 20.
- ³⁰ Izzo, Lawrence L., "The Center of Gravity is Not an Achilles Heel," <u>Military Review</u>, Vol LXVIII, No. 1, January 1988, 76.
- ³¹ United States Marine Corps, <u>FMFM 1, Warfighting</u>, (Washington, DC: GPO, 6 March 1989), 36.
- ³² Ibid., 28.
- ³³ Ibid., 28.
- ³⁴ Ibid., 84.
- ³⁵ Ibid., 36.
- Peterson, Gary C., <u>Center of Gravity: A Most Important Concept Mostly</u>
 <u>Misunderstood.</u> (Newport, RI: Naval War College, 1994), 5-6, 23-24.

³⁷ Izzo, 76.

³⁸ FM 100-5, 1993, 6-8.

³⁹ Joint Staff, <u>Joint Pub 3-0</u>, <u>Doctrine for Joint Operations</u>, (Washington, DC: GPO, 1 February 1995), III-20.

⁴⁰ Ibid., III-20, 21.

⁴¹ Izzo, 77.

⁴² See O'Ballance, Edgar, <u>Malaya: The Communist Insurgent War, 1948-1960</u>, (Hamden, CT: Archon Books, 1966).

⁴³ Schneider, James J, "The theory of Operational Art," (Advanced Military Studies Theoretical Paper No. 3, US Army Command and General Staff College, March 1988), 40.

⁴⁴ Clausewitz, 197.

⁴⁵ Jomini, Antoine Henri, <u>The Art of War</u>, edited by J.D. Hittle in <u>Roots of Strategy</u>, <u>Book 2</u>, (Harrisburg, PA: Stackpole Books, 1987), 466-467.

⁴⁶ FM 100-5, June 1993, 6-7, 6-8.

⁴⁷ Ibid., 6-8.

⁴⁸ Joint Pub 3-0, III-21.

⁴⁹ See Warden, John A, "The Enemy as a System," <u>Airpower Journal</u>, Vol. IX, No. 1, Spring 1995.

Article I to Annex 1-A of the General Framework Agreement for Peace in Bosnia and Herzegovina, as signed in Dayton, Ohio on 14 December 1995, 2.

⁵¹ Ibid., 12.

⁵² Perry, William J., "Why Are We Going to Bosnia?...," <u>Air Force Times</u>, Vol 56, No. 19, 11 December 1995, 33.

⁵³ Woodward, 196.

- ⁶⁰ Joint Pub 3-0, III-21. On page 6-7 of the 1993 FM 100-5, decisive points are described as "**often** geographic in nature."
- ⁶¹ See James J. Schneider, "The Theory of Operational Art," (Advanced Military Studies Theoretical Paper No. 3, US Army Command and General Staff College, March 1988) and James B. Burton, "The Decisive Point: Identifying Points of Leverage in Tactical Combat Operations," (Advanced Military Studies Monograph, U US Army Command and General Staff College, December 1995).

⁵⁴ Ibid., 7-9.

⁵⁵ Ibid., 15.

⁵⁶ See Gagnon, V. P., "Ethnic Nationalism and International Conflict," <u>International Security</u>, Vol. 19, No. 3, Winter 94-95, 130-166.

⁵⁷ Joint Pub 3-0, III-4.

⁵⁸ See O'Conner, Mike, "Nationalism Checkmates Pawn, Too, in Bosnia," <u>New York Times</u>, 28 March 1996, 3.

⁵⁹ Joint Pub 3-0, III-20.

⁶² FM 100-5, 1993, 6-8 and Joint Pub 3-0, III-21.

⁶³ Clausewitz, 595-597.

BIBLIOGRAPHY

Books

- Clausewitz, Carl von. On War. Edited and translated by Michael Howard and Peter Paret. Princeton, New Jersey: Princeton University Press, 1976.
- Forbes, Nevill; Toynbee, Arnold J.; Mitrany, D.; and Hogarth, D.G. <u>The Balkans: A History</u>. New York: AMC Press, Inc., 1970.
- Kaplan, Robert D. <u>Balkan Ghosts: A Journey Through History</u>. New York: St Martin's Press, 1993.
- Jelavich Charles and Barbara Jelavich. <u>The Balkans</u>. Englewood Cliffs, NJ: Prentice-Hall, 1965.
- Jomini, Antoine Henri. <u>The Art of War</u>. Edited by J.D. Hittle in <u>Roots of Strategy</u>. <u>Book 2</u>. Harrisburg, PA: Stackpole Books, 1987.
- Leonhard, Robert R. The Art of Maneuver. Novato, CA: Presido Press, 1991.
- O'Ballance, Edgar. Malaya: The Communist Insurgent War, 1948-60. Hamden, CT: Archon Books, 1966.
- Woodward, Susan L. <u>Balkan Tragedy</u>. Washington, DC: The Brookings Institute, 1995.

Articles and Periodicals

- Alterman, Eric. "The Uses and Abuses of Clausewitz." <u>Parameters</u>. Vol. XVII, No. 2. Summer 1997, 18-31.
- Evans, Ernest. "Peacekeeping: Two Views." World Affairs. Vol. CLV, No. 4. Spring 1993, 143-147.
- Fromm, Peter. "War and OOTW: Philosophical Foundations." Military Review. Vol. LXXV, No. 5. September-October 1995, 57-62.
- Izzo, Lawrence L. "The Center of Gravity is Not an Achilles Heel." Military Review. Vol LXVIII, No. 1. January 1988, 72-77.

- Mendel. William W. "Operational Logic: Selecting the Center of Gravity." Military Review. Vol LXXIII, No 6. June 1993, 2-11.
- Metz, Steven and Frederick M. Downey. "Centers of Gravity and Strategic Planning." Military Review. Vol LXVIII, No 4. April 1988, 22-33.
- Schneider, James J. and Lawrence L. Izzo. "Clausewitz's Elusive Center of Gravity." <u>Parameters.</u> Vol. XVII, No. 3. September 1987, 46-57.
- Swain, Richard M. "Clausewitz, FM 100-5, and the Center of Gravity." Military Review. Vol LXVIII, No 2. February 1988, 83.
- Warden, John A. "The Enemy as a System." <u>Airpower Journal</u>. Vol. IX, No. 1. Spring 1995.

Government Documents

- Department of the Army. <u>Field Manual 100-5: Operations</u>. Washington, DC: Headquarters, Department of the Army, May 1986.
- Department of the Army. <u>Field Manual 100-5: Operations.</u> Washington, DC: United States Government Printing Office, June 1993.
- Department of the Army. <u>Field Manual 100-23: Peace Operations</u>. Washington, DC: United States Government Printing Office, 30 December 1994.
- Joint Staff. Joint Pub 1, <u>Joint Warfare of the US Armed Forces</u>. Washington, DC: United States Government Printing Office, 11 November 1991.
- Joint Staff. Joint Pub 3-0, <u>Doctrine for Joint Operations</u>. Washington, DC: United States Government Printing Office, 1 February 1995.
- Joint Staff. Joint Pub 5-0, <u>Doctrine for Planning Joint Operations</u>. Washington, DC: United States Government Printing Office, 13 April 1995.
- United States Marine Corps. FMFM 1, <u>Warfighting</u>. Washington, DC: United States Government Printing Office, 6 March 1989.

Theses, Studies, and Other Papers

Blank, Stephen J., ed. "Yugoslavia's Wars: The Problem From Hell." Strategic Studies Institute Roundtable Report, US Army War College, 1995.

- Blank, Stephen J., Johnsen, William T., and Tilford, Earl H. "US Policy in the Balkans: A Hobson's Choice." Strategic Institute Studies Report, US Army War College, August 1995.
- Burton, James B. "The Decisive Point: Identifying Points of Leverage in Tactical Combat Operations." Advanced Military Studies Monograph, US Army Command and General Staff College, December 1995.
- Fastabend, David A. "A Theory of Conflict and Operational Art." Advanced Military Studies Monograph, US Army Command and General Staff College, May 1988.
- Greco, Thomas F. "A Survey of Selected Peace Operations Doctrines, and the Utility of Current US Army Peace Operations Doctrine." Master's Thesis, US Army Command and General Staff College, 1995.
- Griswold, Myron J. "Considerations in Identifying and Attacking the Enemy's Center of Gravity." Advanced Military Studies Monograph, US Army Command and General Staff College, May 1986.
- Hoapili, Evan J. "Carl von Clausewitz: Hope and Fear." Department of Operations Paper, US Naval War College, February 1992.
- Johnson, William T. "Deciphering the Balkan Enigma: Using History to Inform Policy." Strategic Studies Institute Study, US Army War College, March 1993.
- ______ "Pandora's Box Reopened: Ethnic Conflict in Europe and Its Implications." Strategic Studies Institute Study, US Army War College, December 1994.
- Kalb, John F. "A Foundation for Operational Planning: The Concepts of Center of Gravity, Decisive Point, and the Culminating Point." Advanced Military Studies Monograph, US Army Command and General Staff College, April 1987.
- Kelly, Patrick III. "Modern Scientific Metaphors of Warfare: Updating the Doctrinal Paradigm." Advanced Military Studies Monograph, US Army Command and General Staff College, May 1993.
- Kriwanek, Thomas M. "The Operational Center of Gravity." Advanced Military Studies Monograph, US Army Command and General Staff College, May 1986.

- Marich, Lou L. "Centers of Gravity in OOTW: A Useful Tool or Just a Black Hole." Advanced Military Studies Monograph, US Army Command and General Staff College, May 1995.
- Pentland, Pat A. "Center of Gravity Analysis and Chaos Theory." Air University Research Report, US Air War College, April 1993.
- Peterson, Gary C. "Center of Gravity: A Most Important Concept Mostly Misunderstood." Joint Maritime Operations Paper, US Naval War College, January 1994.
- Richmond, Melvin E. "Communist Insurgencies and the Relevance of the Concepts of Center of Gravity and Decisive Points." Advanced Military Studies Monograph, US Army Command and General Staff College, May 1988.
- Saxman, John B. "The Concept of Center of Gravity: Does it have Utility in Joint Doctrine and Campaign Planning?" Advanced Military Studies Monograph, US Army Command and General Staff College, May 1992.
- Schmader, John R. "Center of Gravity: The Critical Link in Strategic Planning for Low Intensity Conflict." Individual Study Project, US Army War College, February 1993.
- Schneider, James J. "The theory of Operational Art." Advanced Military Studies Theoretical Paper No. 3, US Army Command and General Staff College, March 1988.
- Viale, Charles R. "A Conversation at the Club: Another Analysis of the Concept of Center of Gravity." Advanced Military Studies Monograph, US Army Command and General Staff College, February 1988.